ABSTRACT

The distribution of traffic flows in a load-sharing redundancy group that includes a first gateway device and a second gateway device includes assigning a first set of forwarding addresses to the first gateway device and a second set of forwarding addresses to the second gateway device. The redundancy group distributes forwarding addresses to hosts which in turn use the distributed forwarding addresses to send packets to the redundancy group. The traffic flow for each of the assigned forwarding addresses is measured and may be compared to a target traffic flow. The traffic flow is adjusted to close in on the target traffic flow. Adjustment of the traffic flow can be accomplished either by changing the existing measured traffic flow by re-assigning a forwarding address originally assigned to one gateway device to a different gateway device or by altering future distribution of forwarding addresses so that additional traffic is sent to one or more forwarding addresses having lower measured traffic. The gateway devices can be routers using virtual MAC addresses as forwarding addresses. The redundancy group may also be configured to provide failover services in the event that one of the gateway devices ceases operation.